

WHAT IS CLAIMED IS:

1. A method of constructing a representation of an object having at least one property, the method comprising:

identifying at least one property group associated with the object which has been chosen to represent the object, at least one property of the object belonging to each property group associated with the object;

identifying any other object that the object references within a property of an identified property group;

retrieving data corresponding to each of the properties belonging to the at least one property group; and

representing the object using the retrieved data.

2. The method of claim 1, wherein the step of representing the object further comprises visually representing the object by displaying the retrieved data.

3. The method of claim 2, wherein the step of displaying the retrieved data further comprises displaying names of properties belonging to the at least one property group adjacent values of those properties.

4. The method of claim 3, wherein displaying names of properties belonging to the at least one property group further comprises displaying a name of each property group adjacent the names of the properties belonging to that property group and adjacent the values of those properties.

5. The method of claim 1, wherein representing the object using the retrieved data further comprises representing the object using its own property groups and the ones of its parent.

6. The method of claim 1, wherein at least one object inheritance hierarchy exist between the object and the other identified objects, and wherein each property group is unique to a particular object inheritance hierarchy.

7. The method of claim 6, wherein the object is a specialization of a second object, and wherein the object inherits the property groups associated with the second object.

8. The method of claim 6, wherein for each property group, properties belonging to the property group include at least one property of the object and one or more properties of only one other object.

9. The method of claim 8, wherein for at least one property group, the step of retrieving data

corresponding to each of the properties belonging to the property group further comprises retrieving the data corresponding to properties of the object and to properties of the only one other object associated with the property group.

10. The method of claim 1, wherein identifying the at least one property group associated with the object further comprises identifying a default property group associated with the object.

11. A method of constructing representations of objects each having at least one property, the method comprising:

associating property groups with objects in a data base, each property group associated with an object including at least one property of the object;

storing the property groups in the database; and
for each of a plurality of objects in the database, specifying which property groups are to be used in representing the object.

12. The method of claim 11, wherein object inheritance hierarchies exist between some of the plurality of objects in the database, wherein the step of associating property groups with objects further comprises associating property groups with objects such that each property group is unique to a particular object inheritance hierarchy.

13. The method of claim 11, wherein the step of associating property groups with objects in the data base further comprises associating property groups with objects in the database such that at least one of the property groups is associated with two objects such that properties of the two objects belong to the property group.

14. The method of claim 11, and for constructing a representation of a particular object having at least one property, the method further comprising:

- identifying at least one property group associated with the object which has been chosen to represent the object, at least one property of the object belonging to each property group associated with the object;

- identifying any other object that the object references within a property of an identified property group;

- retrieving data corresponding to each of the properties belonging to the at least one property group; and

- representing the object using the retrieved data.

15. The method of claim 14, wherein the step of representing the object further comprises visually

representing the object by displaying the retrieved data.

16. The method of claim 15, wherein the step of displaying the retrieved data further comprises displaying names of properties belonging to the at least one property group adjacent values of those properties.

17. The method of claim 16, wherein displaying names of properties belonging to the at least one property group further comprises displaying a name of each property group adjacent the names of the properties belonging to that property group and adjacent the values of those properties.

18. The method of claim 14, wherein at least one object inheritance hierarchy exist between the object and the other identified objects.

19. The method of claim 18, wherein the object is a specialization of a second object, and wherein the object inherits the property groups associated with the second object.

20. The method of claim 18, wherein for each property group, properties belonging to the property group include at least one property of the object and one or more properties of only one other object.

21. The method of claim 20, wherein for at least one property group, the step of retrieving data corresponding to each of the properties belonging to the property group further comprises retrieving the data corresponding to properties of the object and to properties of the only one other object associated with the property group.

22. An object representation system for constructing a representation of an object having at least one property, the system comprising:

- an object database storing data for populating instances of the object;

- an object definition database storing object definition data which defines properties of the object, and storing at least one property group associated with the object;
- and

- an object representation engine coupled to the object database and to the object definition database, the engine configured to generate a representation of the object using at least one property group stored in the object definition database.

23. The system of claim 22, wherein the engine is configured to generate the representation of the object by implementing the steps comprising:

- identifying at least one property group associated with the object which has been

chosen to represent the object, at least one property of the object belonging to each property group associated with the object;

identifying any other object that the object references within a property of an identified property group;

retrieving data corresponding to each of the properties belonging to the at least one property group; and

representing the object using the retrieved data.

24. The system of claim 23, wherein the step of representing the object further comprises visually representing the object by displaying the retrieved data.

25. The system of claim 24, wherein the step of displaying the retrieved data further comprises displaying names of properties belonging to the at least one property group adjacent values of those properties.

26. The system of claim 25, wherein displaying names of properties belonging to the at least one property group further comprises displaying a name of each property group adjacent the names of the properties belonging to that property group and adjacent the values of those properties.

27. The system of claim 23, wherein at least one object inheritance hierarchy exist between the object and the other identified objects, and wherein each property group is unique to a particular object inheritance hierarchy.

28. The system of claim 27, wherein the object is a specialization of a second object, and wherein the object inherits the property groups associated with the second object.

29. The system of claim 27, wherein for each property group, properties belonging to the property group include at least one property of the object and one or more properties of only one other object.

30. The system of claim 29, wherein for at least one property group, the step of retrieving data corresponding to each of the properties belonging to the property group further comprises retrieving the data corresponding to properties of the object and to properties of the only one other object associated with the property group.

31. The system of claim 23, wherein identifying the at least one property group associated with the object further comprises identifying a default property group associated with the object.